

WHAT IS CLAIMED IS:

1 *Sub B1*  
2 1. In a food for ictalurid catfish, and fish with  
3 similar feeding behavior, the improvement which comprises the  
4 addition of an effective amount of: (a) one or more of the free  
5 amino acids: L-alanine, L-arginine, and L-proline; or (b) a protein  
6 precursor of said amino acids, that upon the action of a  
7 proteolytic enzyme will produce said one or more amino acids, or a  
8 mixture of (a) and (b); wherein said effective amount is an amount  
which will release the snapping and biting response of the fish.

1 2. The food of claim 1 wherein the overall amount of the  
2 one or more free amino acids is up to about 5 wt.%.

1 3. The food of claim 2 wherein the overall amount of the  
2 one or more free amino acids is up to about 1 wt.%.

1 4. The food of claim 3 wherein up to about 0.1 wt.% of  
2 the total weight of the food is the free amino acid portion.

1 5. The food of claim 4 wherein all three of the free  
2 amino acids is present.

1 6. The food of claim 1 wherein the one or more free  
2 amino acids is present in an amount which will produce, when placed  
3 in a body of water, plumes having a concentration of one or more

4 of: at least about 0.001M L-alanine, at least about 0.001M L-  
5 proline, and at least about 0.0001M L-arginine.

1 7. The food of claim 6 wherein all three of the free  
2 amino acids is present.

1 8. A method for producing food for ictalurid catfish,  
2 and fish with similar feeding behavior, which method comprises  
3 incorporating into said food: (a) an effective amount of one or  
4 more of the free amino acids: L-alanine, L-arginine, and L-proline;  
5 or (b) a protein precursor and proteolytic enzyme which will  
6 produce one or more of said amino acids when placed in water, or a  
7 mixture of (a) and (b); wherein the effective amount is that which  
8 will release the snapping and biting response of the ictalurid  
9 catfish and fish with similar feeding behavior.

1 9. The method of claim 8 wherein the amount of said one  
2 or more free amino acids which is incorporated in the food is up to  
3 about 1 wt.%, based on the total weight of the food plus added  
4 amino acids.

1 10. The method of claim 9 wherein the amount of said one  
2 or more free amino acids which is incorporated in the food is up to  
3 about 0.1 wt.%, based on the total weight of the food plus added  
4 amino acids.

1           11. The method of claim 10 wherein the amount of said  
2 one or more free amino acids which is incorporated in the food is  
3 from about 0.1 wt.% to 0.5 wt.%, based on the total weight of the  
4 food plus added amino acids.

1           12. The method of claim 10 wherein the one or more free  
2 amino acids is present in an amount which will produce, when placed  
3 in a body of water, plumes having a concentration of one or more  
4 of: at least about 0.001M L-alanine, at least about 0.001M L-  
5 proline, and at least about 0.0001M L-arginine.

1           13. The method of claim 12 wherein all three of the free  
2 amino acids is present.